

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-5. (Canceled)

6. (Currently Amended) A solid-state image-sensing device comprising:
a plurality of pixels, each pixel capable of outputting electric signals either in a
first mode in response to a first resetting signal in which the electric signals are natural-
logarithmically proportional to an amount of incident light or in a second mode in
response to a second resetting signal in which the electric signals are linearly proportional
to the amount of incident light; and

a detection circuit for detecting variations in sensitivity among the pixels set in
each of the first and second modes[.] ;

wherein:

the detection circuit provides the first and second resetting signals, and wherein the
first resetting signal has different timing from the second resetting signal.

7. (Original) A solid-state image-sensing device as claimed in claim 6,
wherein the detection circuit comprises:
a constant-current source; and
a switch for electrically connecting and disconnecting the constant-current source
to and from the pixels.

8. (Original) A solid-state image-sensing device as claimed in claim 6, wherein the pixels each comprise:
a photoelectric conversion element for outputting an electric signal proportional to an amount of incident light;
a first transistor connected in series with the photoelectric conversion element; and
a second transistor, having a control electrode thereof connected to a node between the first transistor and the photoelectric conversion element, for outputting the electric signal,
wherein, in the first mode, a first voltage is applied to a control electrode of the first transistor to make the first transistor operate in a subthreshold region, and
wherein, in the second mode, a second voltage is applied to the control electrode of the first transistor to turn the first transistor off.

9. (Original) A solid-state image-sensing device as claimed in claim 8, wherein the detection circuit comprises:
a constant-current source; and
a switch for electrically connecting and disconnecting the constant-current source to and from a node between the first transistor and the photoelectric conversion element,
wherein, when detecting variations in sensitivity among the pixels in the first mode, the first transistor is made to operate in a subthreshold region and the switch is turned on so that a constant current is fed from the constant-current source through the switch to the first transistor to sample output signals from the pixels, and
wherein, when detecting variations in sensitivity among the pixels in the second mode, the first transistor is turned off and the switch is turned on so that a constant voltage is fed through the constant-current source to the control electrode of the second transistor to initialize the pixels and then sample output signals from the pixels.

10-22. (Canceled)

23. (Previously Presented) A solid-state image-sensing device as claimed in claim 6,

wherein the pixels each comprise:

a transistor having a first electrode, a second electrode, and a control electrode and receiving at the control electrode an output from a photoelectric converter; and

a capacitor connected to the second electrode of the transistor.

24. (Previously Presented) A solid-state image-sensing device as claimed in claim 23, wherein:

the detection circuit provides the first resetting signal to selected first pixels and the second resetting signal to other selected second pixels to detect variations among the first and second pixels in each mode.

25. (Canceled)